



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,337	05/25/2001	Darren Chen	586-26-PA	4860

22887 7590 07/31/2003

DISCOVISION ASSOCIATES
INTELLECTUAL PROPERTY DEVELOPMENT
2355 MAIN STREET, SUITE 200
IRVINE, CA 92614

EXAMINER

LAVARIAS, ARNEL C

ART UNIT	PAPER NUMBER
----------	--------------

2872

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,337

Applicant(s)

CHEN, DARREN

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/17/02 in Paper No. 11 has been entered.

Drawings

2. The corrected or substitute drawings were received on 12/17/02 in Paper No. 10. These drawings are not acceptable.
3. The drawings are objected to because of the following informality:
Figure 9- n_2 and n_3 should have arrows pointing to their respective layers.
A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Response to Amendment

4. The cancellation of Claim 2 in Paper No. 11, dated 12/17/02, is acknowledged and accepted.

Art Unit: 2872

5. The amendments to Claims 1, 11-12 in Paper No. 11, dated 12/17/02, are acknowledged and accepted.
6. The addition of Claims 14-17 in paper No. 11, dated 12/17/02, is acknowledged and accepted.

Response to Arguments

7. The Applicant's arguments with respect to Claims 1-13 in Paper No. 11, dated 12/17/02, have been considered but are moot in view of the new ground(s) of rejection.
8. Claims 1, 3-17 are rejected as follows.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3-14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldsmith et al. (U.S. Patent No. 5113387).

With regard to Claim 1, Vincent et al. discloses an optical device and method used in an optical read/write head comprising a first optical plane (See 104 of Figure 4) and a second optical plane (See 102 of Figure 4) for respectively reflecting a first light (See beam emitted from 54 in Figure 4) and a second light (See beam emitted from 52 in Figure 4) to an identical optical axis (See combined beam reflecting off of 104 and 102

Art Unit: 2872

and directed to 124 in Figure 4). Vincent et al. also discloses the first light and second light being a laser beam (See col. 7, lines 38-43). Vincent et al. also discloses the first optical plane being parallel to the second optical plane (See 104 and 102 of Figure 4). Vincent et al. also discloses the first light and the second light being generated at different timing (See col. 11, line 3-col. 12, line 55). Vincent et al. also discloses the first light being directly reflected to the optical axis by the first optical plane (See 104 in Figure 4), and the second light passing through the first optical coating plane and being reflected by the second optical coating plane (See 102 in Figure 4). Vincent et al. also discloses the first optical plane (See 104 in Figure 4) and second optical plane (See 102 in Figure 4) being respectively coated on two opposite sides of a first light-penetrable material (See optical element between reflecting surfaces of 104 and 102 in Figure 4). Vincent et al. also discloses a second light-penetrable material (See optical element between reflecting surfaces of 102 and 100 in Figure 4) for reflecting a third light (See light beam emitted from 50 in Figure 4) to the optical axis. Vincent et al. discloses a third optical plane (See 100 in Figure 4) being coated on the second light-penetrable material (See optical element between reflecting surfaces of 102 and 100 in Figure 4), and the third light passing through the first optical plane (See 104 in Figure 4) and the second optical plane (See 102 in Figure 4) and then being reflected to the optical axis by the third optical plane (See 100 in Figure 4). Vincent et al. also discloses an optical device used in an optical read/write head comprising plural optical coating planes (See 100, 102, 104 in Figure 4) for reflecting plural laser beams (See 50, 52, 54 in Figure 4) to an identical optical axis (See combined beam reflecting off of 104, 102, and 100 and

Art Unit: 2872

directed to 124 in Figure 4). Vincent et al. also discloses an optical device comprising a first optical plane (See 104 in Figure 4) and a second optical plane (See 178 in Figure 4) coated on two opposite sides of a light-penetrable material (See optical element between reflecting surfaces of 104 and 102 in Figure 4) for reflecting a first light (See 54 in Figure 4) and a second light (See 52 in Figure 4) to an identical optical axis (See combined beam reflecting off of 104, 102 and directed to 124 in Figure 4). Vincent et al. also discloses a second light-penetrable material (See optical element between reflecting surfaces of 102 and 100 in Figure 4) for reflecting a third light (See 50 in Figure 4) to said optical axis. Vincent et al. also discloses an optical component (See 100, 102, 104, 106, 108 in Figure 4) comprising a plurality of optical planes for reflecting a plurality of light beams to an identical axis; and a mirror (See 124 in Figure 4) configured to direct any one of the light beams oriented at the identical optical axis to the surface of an optical disc (See 10 in Figure 4). Vincent et al. lacks the first, second, and third reflecting optical planes being coating planes. It is well known in the art of optical thin films to utilize multilayer dielectric thin film coatings as highly reflective coatings to reflect light over a band of wavelengths. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first, second, and third optical planes of Vincent et al. be fabricated from multilayer dielectric thin film coatings to take advantage of the high reflectivities and low transmissivities over the band of wavelengths, as well as take advantage of mature, well-known, and inexpensive thin film deposition techniques for producing such multilayer dielectric thin film coatings.

Art Unit: 2872

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent et al. in view of Fukakusa et al. (U.S. Patent No. 6256283).

Vincent et al. discloses the invention as set forth above, except for a plurality of light sources combined together in the same pack wherein the plurality of light beams are produced, respectively, from the plurality of light sources. However, Fukakusa et al. teaches an optical pickup device (See for example Figures 1 and 7) wherein multiple light sources, such as laser diodes (See 2, 9 in Figures 1 and 7) are provided in the same package (See Figure 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the plurality of light beams of Vincent et al. be produced from a plurality of light sources combined together in the same pack, as taught by Fukakusa et al., for the purpose of reducing the size and weight of the overall optical pickup head.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM EST.

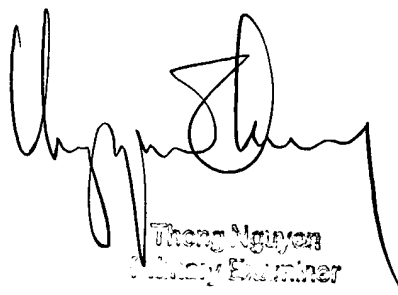
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Art Unit: 2872

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Arnel C. Lavarias
July 15, 2003



Theng Nguyen
Primary Examiner